

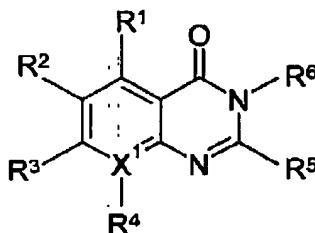
RECEIVED  
CENTRAL FAX CENTER  
DEC 14 2006

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

Claim1 (currently amended) A compound having the chemical formula:



wherein:

$R^1$ ,  $R^2$  and  $R^3$  is each independently chosen from: H, halogen, CN,  $CF_3$ ,  $OCF_3$ , lower alkyl, lower alkoxy, NH-acetyl, NH-lower alkyl, NH-alkylaryl, N(lower alkyl)<sub>2</sub>, C(O)OH, C(O)O-lower alkyl, C(O)NH-lower alkyl, C(O)N(lower alkyl)<sub>2</sub>, OH, OC(O)-lower alkyl, OC(O)-lower alkylamino, OC(O)-lower alkyl-N(lower alkyl)<sub>2</sub>, and OP(O)(OH)<sub>2</sub>;

~~$X^1$  is chosen from: C and N, such that when  $X^1$  is C then~~  $R^4$  is chosen from: H, halogen, CN,  $CF_3$ ,  $OCF_3$ , lower alkyl, lower alkoxy, NH-acetyl, NH-lower alkyl, NH-alkylaryl, N(lower alkyl)<sub>2</sub>, C(O)OH, C(O)O-lower alkyl, C(O)NH-lower alkyl, C(O)N(lower alkyl)<sub>2</sub>, OH, OC(O)-lower alkyl, OC(O)-lower alkylamino, OC(O)-lower alkyl-N(lower alkyl)<sub>2</sub>, and OP(O)(OH)<sub>2</sub>;

$X^1$  is selected from one of C and N, such that when  $X^1$  is N, then  $R^4$  is absent;

$R^5$  is chosen from: H, a thienyl, styryl, pyridyl and phenyl group, wherein the thienyl, styryl, pyridyl and phenyl group is optionally substituted with 1 to 3 substituents chosen from: H, halogen, CN,  $CF_3$ ,  $OCF_3$ , lower alkyl, NH-alkylaryl, N(lower alkyl)<sub>2</sub>, OH, OC(O)-lower alkyl, OC(O)-lower alkylamino, OC(O)-lower alkyl-NH-lower alkyl, OC(O)-lower alkyl-N(lower alkyl)<sub>2</sub>, and OP(O)(OH)<sub>2</sub>;

Page 4 of 11

SalLake-293594.1 0050821-00005

U.S. Patent Application Serial No. 10/531,161  
Amd. and Response dated December 14, 2006

BEST AVAILABLE COPY

$R^6$  comprises  $-(CH_2)_n-X^2-R^7$  wherein  $n$  is 1 or 2,  $X^2$  is O, C(O), CH(OH), lower alkyl or a single bond, and

$R^7$  is chosen from a pyridyl and a phenyl group, wherein  $R^7$  is optionally substituted with 1 to 3 substituents chosen from: H, halogen, CN,  $OCF_3$ , unsubstituted lower alkyl, NH-alkylaryl, OC(O)-lower alkyl, OC(O)-lower alkylamino, OC(O)-lower alkyl-N(lower alkyl)<sub>2</sub>, and OP(O)(OH)<sub>2</sub>;

or a pharmaceutically acceptable salt or complex thereof;

wherein the compound has a Calcium Receptor Inhibitor Assay IC<sub>50</sub> value of 30  $\mu$ M or lower.

Claim 2 (original) A compound according to claim 1, wherein  $R^1$ ,  $R^2$ ,  $R^3$ , and  $R^4$  are independently selected from one of hydrogen, halogen, lower alkyl, OH and OP(O)(OH)<sub>2</sub>.

Claim 3 (original) A compound according to claim 2, wherein said halogen is selected from one of fluorine and chlorine.

Claim 4 (original) A compound according to claim 2, wherein lower alkyl is methyl.

Claim 5 (original) A compound according to claim 2 wherein,  $R^1$  is selected from one of hydrogen and methyl.

Claim 6 (original) A compound according to claim 2, wherein  $R^2$  is selected from one of hydrogen, fluorine, chlorine, hydroxy, and methyl.

Claim 7 (original) A compound according to claim 2, wherein  $R^3$  is selected from one of hydrogen and chlorine.

Page 5 of 11

SahLake-293594.1 0050821-00005

U.S. Patent Application Serial No. 10/531,161  
Amd. and Response dated December 14, 2006

BEST AVAILABLE COPY

Claim 8 (original) A compound according to claim 2, wherein  $R^4$  is selected from one of hydrogen, hydroxy, and methyl.

Claim 9 (original) A compound according to claim 1, wherein  $X^1$  is carbon.

Claim 10 (original) A compound according to claim 1, wherein  $R^5$  is phenyl optionally substituted with 1 or 2 hydroxy.

Claim 11 (original) A compound according to claim 1, wherein  $R^6$  further comprises the group  $-(CH_2)_n-X^2-R^7$ ;

wherein  $n$  is 1 or 2;

$X^2$  is a single bond, and

$R^7$  is phenyl optionally substituted with 1 or 2 halogens.

Claim 12 (original) A compound according to claim 11, wherein  $n$  is 2 and said halogens are selected from one of fluorine and chlorine.

Claim 13 (original) A pharmaceutical composition comprising a compound according to claim 1 and pharmaceutically acceptable diluent or excipient.

Claim 14 (currently amended) A method of treating a disease or disorder characterized by abnormal bone or mineral homeostasis chosen from: osteosarcoma, periodontal disease, fracture healing, osteoarthritis, rheumatoid arthritis, Paget's disease, humoral hypercalcemia malignancy, and osteoporosis, which is treatable by increasing serum parathyroid hormone levels, comprising the administration to a subject in need of treatment thereof an effective amount of a compound according to claim 1.

Claim 15 (cancelled)

Page 6 of 11

SaltLake-293594.1 0050821-00005

U.S. Patent Application Serial No. 10/531,161  
Amd. and Response dated December 14, 2006

BEST AVAILABLE COPY

Claim 16 (original) A method according to claim 14, wherein the bone or mineral disease or disorder is osteoporosis.

Claim 17 (currently amended) A method of increasing serum parathyroid hormone levels in mammals for treatment of a disease or disorder chosen from: osteosarcoma, periodontal disease, fracture healing, osteoarthritis, rheumatoid arthritis, Paget's disease, humoral hypercalcemia malignancy, and osteoporosis, which comprises the administration to a subject which may be benefited thereby an effective amount of a compound according to claim 1, sufficient to increase serum parathyroid hormone levels.

Claim 18 (original) A method for preparing 2,3,5,6,7,8-substituted 3H-quinazolin-4-ones by reacting 2,4,5,6,7,8-substituted benzo[d][1,3]oxazin-4-ones with primary amines under microwave irradiation conditions.

Claim 19 (currently amended) A compound selected from one of:

2-(2-hydroxy-phenyl)-3-phenethyl-3H-quinazolin-4-one;  
2-(2,5-dihydroxy-phenyl)-3-phenethyl-3H-quinazolin-4-one;  
2-(3-hydroxy-phenyl)-3-phenethyl-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-3-(2-phenoxy-ethyl)-3H-quinazolin-4-one;  
3-[2-(4-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
3-[2-(2-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
3-[2-(3-chloro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
3-[2-(2-chloro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-3-[2-(4-methoxy-phenyl)-ethyl]-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-3-[2-(2-methoxy-phenyl)-ethyl]-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-3-(2-p-tolyl-ethyl)-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-6-methyl-3-phenethyl-3H-quinazolin-4-one;

Page 7 of 11

SalilLako-293594.1 0050821-00005

U.S. Patent Application Serial No. 10/531,161  
Amd. and Response dated December 14, 2006

BEST AVAILABLE COPY

6-fluoro-2-(2-hydroxy-phenyl)-3-phenethyl-3H-quinazolin-4-one;  
6-chloro-2-(2-hydroxy-phenyl)-3-phenethyl-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-3-phenethyl-5-phenethylamino-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-5-methyl-3-phenethyl-3H-quinazolin-4-one;  
7-chloro-2-(2-hydroxy-phenyl)-3-phenethyl-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-8-methyl-3-phenethyl-3H-quinazolin-4-one;  
6-fluoro-3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
6-fluoro-3-[2-(2-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
7-fluoro-3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
3-[2-(2-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-5-methyl-3H-quinazolin-4-one;  
3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-5-methyl-3H-quinazolin-4-one;  
3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-6-methyl-3H-quinazolin-4-one;  
3-[2-(2-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-6-methyl-3H-quinazolin-4-one;  
6-chloro-3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
6-chloro-3-[2-(2-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-6-methoxy-3H-quinazolin-4-one;  
3-[2-(3-fluoro-phenyl)-ethyl]-6-hydroxy-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
acetic acid 2-{6-fluoro-3-[2-(3-fluoro-phenyl)-ethyl]-4-oxo-3,4-dihydro-quinazolin-2-yl}-phenyl ester;  
3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-8-methoxy-3H-quinazolin-4-one;  
isobutyric acid 2-{6-fluoro-3-[2-(3-fluoro-phenyl)-ethyl]-4-oxo-3,4-dihydro-quinazolin-2-yl}-phenyl ester;  
sodium salt of 6-fluoro-3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
8-chloro-2-(2-hydroxy-phenyl)-3-phenethyl-3H-quinazolin-4-one;  
7-chloro-3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
7-chloro-3-[2-(2-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3H-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-3-(2-pyridin-3-yl-ethyl)-3H-quinazolin-4-one;

Page 8 of 11

SaltLake-293594.1 0050821-00005

U.S. Patent Application Serial No. 10/531,161  
Amd. and Response dated December 14, 2006

BEST AVAILABLE COPY

6-fluoro-2-(2-hydroxy-phenyl)-3-(2-pyridin-3-yl-ethyl)-3*H*-quinazolin-4-one;  
2-(2-hydroxy-phenyl)-3-phenethyl-3*H*-pyrido[2,3-*d*]pyrimidin-4-one;  
3-[2-(3-fluoro-phenyl)-ethyl]-2-(2-hydroxy-phenyl)-3*H*-pyrido[2,3-*d*]pyrimidin-4-one;  
3-(1,1-dimethyl-3-phenyl-propyl)-6-fluoro-2-(2-hydroxy-phenyl)-3*H*-quinazolin-4-one;  
methylamino-acetic acid 2-{6-fluoro-3-[2-(3-fluoro-phenyl)-ethyl]-4-oxo-3,4-dihydro-  
quinazolin-2-yl}-phenyl ester hydrochloride;  
6-fluoro-2-(2-hydroxy-phenyl)-3-(2-phenyl-propyl)-3*H*-quinazolin-4-one;  
6-fluoro-2-(2-hydroxy-phenyl)-3-(*R*-2-phenyl-propyl)-3*H*-quinazolin-4-one;  
6-fluoro-2-(2-hydroxy-phenyl)-3-(*S*-2-phenyl-propyl)-3*H*-quinazolin-4-one; and  
6-fluoro-2-(2-hydroxy-phenyl)-3-(3-phenyl-propyl)-3*H*-quinazolin-4-one  
or a pharmaceutically acceptable salt or complex thereof.

Page 9 of 11

SaltLake-293594.1 0050821-00005

U.S. Patent Application Serial No. 10/531,161  
Amd. and Response dated December 14, 2006

BEST AVAILABLE COPY